

IN THE CLAIMS:

1. (currently amended) An optical microcantilever for a scanning near field microscope, the optical microcantilever comprising:

an optical waveguide having a light input/output end, and a free end for propagating light incident from the light input/output end, a first side, and a second side opposite to the first side;

a tip formed on the first side and at the free end of the optical waveguide and having a microscopic aperture; and

a reflecting film disposed on the second side of the optical waveguide; and

a reflecting member forming part of the reflecting film and disposed at the free end of the optical waveguide, the reflecting member and having a generally planar surface for reflecting light propagated from the light input/output end of the optical waveguide and for guiding the reflected light towards the microscopic aperture of the tip, or for reflecting light propagated from the microscopic aperture towards the light input/output end of the optical waveguide.

2. (canceled)

3. (previously presented) An optical microcantilever according to claim 1; wherein at least part of the optical waveguide comprises a core and a cladding disposed on the core.

4. (currently amended) An optical microcantilever according to claim 3; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side; and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

5. - 23. (canceled)

24. (previously presented) An optical microcantilever according to claim 1; wherein the reflecting member comprises a mirror.

25. (previously presented) An optical microcantilever according to claim 24; wherein the entire mirror is generally planar.

26. (previously presented) An optical microcantilever according to claim 1; wherein the entire reflecting member is generally planar.

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27. (currently amended) An optical microcantilever according to claim 1; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side, and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

28. (previously presented) An optical microcantilever according to claim 3; wherein the cladding surrounds the core.

29. (currently amended) An optical microcantilever according to claim 28; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side, and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

30. (previously presented) An optical microcantilever according to claim 3; wherein the core has two sides; and wherein the cladding is disposed on one of the two sides of the core.

31. (currently amended) An optical microcantilever according to claim 30; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side, and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

32. (previously presented) An optical microcantilever according to claim 3; wherein the core has two sides; and wherein the cladding is disposed on the two sides of the core.

33. (currently amended) An optical microcantilever according to claim 32; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side, and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

34. (currently amended) An optical microcantilever comprising:

an optical waveguide for propagating light and having a first side, a second side opposite to the first side, and a tip portion formed on the first side and at a free end

of the optical waveguide, the tip portion having a microscopic aperture; and

a reflecting film disposed on the second side of the optical waveguide; and

a reflecting member forming part of the reflecting film and disposed at the free end of the optical waveguide, the reflecting member and having a generally planar surface for reflecting light propagated by the optical waveguide and for guiding the reflected light towards the microscopic aperture to generate near-field light at the microscopic aperture.

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35. (currently amended) An optical microcantilever according to claim 34; ~~wherein the optical waveguide has a first side on which the tip is formed and a second side opposite to the first side, and further comprising a light-blocking film disposed on the first side of the optical waveguide and a reflecting film disposed on the second side of the optical waveguide.~~

36. (canceled)

37. (previously presented) An optical microcantilever according to claim 35; wherein the optical waveguide has a longitudinal axis, a first section extending in a direction generally parallel to the longitudinal axis, and a second section extending from the first section at a

preselected angle relative to the longitudinal axis so that the light reflected by the reflecting member is guided towards the microscopic aperture to generate near-field light at the microscopic aperture.

38. (previously presented) An optical microcantilever according to claim 37; wherein the reflecting film is disposed on the first section of the optical waveguide and the reflecting member is disposed on the second section of the optical waveguide.

39. (canceled).

40. (currently amended) An optical microcantilever comprising:

an optical waveguide for propagating light and having a longitudinal axis, a first side, a second side opposite to the first side, and a tip portion formed on the first side and at a free end of the optical waveguide, the tip portion having a microscopic aperture; and

a reflecting film disposed on the second side of the optical waveguide; and

a reflecting film member forming part of the reflecting film and being disposed on at least a portion of the optical waveguide, the reflecting film member having a generally planar surface disposed proximate the free end of the optical waveguide at a preselected angle relative to the

longitudinal axis for reflecting light propagated by the optical waveguide and for guiding the reflected light towards the microscopic aperture to generate near-field light at the microscopic aperture.

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